REMARKS

Applicant respectfully requests reconsideration of this application in view of the following remarks. For the Examiner's convenience and reference, Applicant's remarks are presented in substantially the same order in which the corresponding issues were raised in the Office Action.

Status of the Claims

Claims 1-18 are pending. Claim 8 is currently amended to more clearly define pre-existing claim limitations. No claims are canceled. No claims are added. No new matter has been added.

Summary of the Office Action

Claim 8 stand objected to because of informalities.

Claims 1-18 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent Application No. 6,185,692 to Wolford (hereinafter "Wolford").

Response to Objections

Claim 8 stands objected to because of informalities. In particular, the Office Action states that claim 8 should depend on claim 7. Applicant respectfully submits that claim 8 has been amended to depend on claim 7 as suggested by the Examiner. Applicant appreciates the Examiner's recommendation and respectfully requests that the objection to claim 8 be withdrawn.

Response to Rejections under 35 U.S.C. § 102(b)

The Office Action rejected claims 1-18 under 35 U.S.C. § 102(b) as being anticipated by Wolford. Applicant respectfully requests withdrawal of these rejections because the cited reference fails to disclose all of the limitations of the claims.

CLAIMS 1-6

Claim 1 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Wolford. Applicant respectfully submits that claim 1 is patentable over the cited

reference because Wolford does not disclose all of the limitations of the claim. Claim 1 recites:

An apparatus, comprising:
a variable speed bus;
a first unit coupled to the variable speed bus;
a second unit coupled to the variable speed bus; and
an arbitration and bus clock control unit to adjust the
variable speed bus frequency depending on the bandwidth
requirements of the first and second units, the arbitration and
bus clock control unit to monitor which of the first and second
units are active and to select an appropriate arbitration
configuration depending on which of the first and second units are
active. (emphasis added)

Applicant respectfully submits that claim 1 requires that the arbitration and bus clock control unit to adjust the variable speed bus frequency depending on the bandwidth requirements of the first and second units. Wolford fails to disclose at least this limitations.

Wolford is directed to a data processing system includes a bus, one or more loads coupled to the bus, and a clock generator, which generates a bus clock signal having a first frequency. While operating at the first frequency, the number of loads connected to the bus is determined, and in response to this determination, the frequency of the bus clock signal is automatically changed from the first frequency to a second frequency. See Wolford, Abstract. The frequency range of the bus clock signal is determined by the length of the bus and the number and types of devices attached to the bus. See col. 3, lines 6-8. In particular, Wolford expressly discloses that the bus clock frequency and the number of loads (e.g., devices attached to the bus) have a pre-determined relationship, namely 1-3 loads operate at 66 MHz, 4-5 loads operate at 50 MHz, 6-10 loads operate at 33 MHz, and 11-15 loads operate at 25 MHz. See col. 3, lines 8-29. Furthermore, the frequency of the bus clock signal is constrained to operate at a frequency no greater than the lowest maximum operating frequency of any bus device directly connected to the bus. Consequently, the appropriate frequency of the bus clock signal is set based on the number of bus devices detected on the bus and the lowest maximum operating frequency of those bus devices on the bus. See col. 4, lines 30-41. Accordingly, Wolford discloses that the frequency of the bus clock signal is adjusted depending on the number of bus

devices detected on the bus and the lowest maximum operating frequency of those bus devices, and not on the bandwidth requirements of the bus devices. Nothing in Wolford discloses that the frequency of the bus clock signal is adjusted depending on bandwidth requirements of the first and second units that are coupled to the bus, as required in claim 1.

Moreover, Wolford expressly recognizes the difference between bandwidth requirements of the bus, and the bus clock frequency, by separately identifying them and giving an example that to increase the throughput of the selected bus architecture, the bus clock frequency and/or bandwidth can be increased, while decreasing the bus communication protocol overhead. See col. 1, lines 27-31, and col. 1, lines 33-38. Since Wolford expressly recognizes the difference between the two factors, bandwidth and frequency of the bus, adjusting the frequency of the bus clock signal cannot be interpreted to include bandwidth requirements. Even if frequency is interpreted to include bandwidth requirements, nothing in Wolford discloses bandwidth requirements of the individual bus devices.

Given that the cited reference fails to disclose all of the limitations of the claim, Applicant respectfully submits that claim 1 is patentable over the cited reference. Accordingly, Applicant requests that the rejection of claim 1 under 35 U.S.C. § 102(b) be withdrawn.

Given that claims 2-6 depend from independent claim 1, which is patentable over the cited reference, Applicant respectfully submits that dependent claims 2-6 are also patentable over the cited reference. Accordingly, Applicant requests that the rejection of claims 2-6 under 35 U.S.C. § 102(b) be withdrawn.

CLAIMS 7-12

Claim 7 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Wolford. Applicant respectfully submits that claim 7 is patentable over the cited reference for similar reasons described above with respect to claim 1. Accordingly, Applicant requests that the rejection of claim 7 under 35 U.S.C. § 102(b) be withdrawn.

Given that claims 8-12 depend from independent claim 7, which is patentable over the cited reference, Applicant respectfully submits that dependent claims 8-12 are

also patentable over the cited reference. Accordingly, Applicant requests that the rejection of claims 8-12 under 35 U.S.C. § 102(b) be withdrawn.

CLAIM 13-18

Claim 13 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Wolford. Applicant respectfully submits that claim 13 is patentable over the cited reference for similar reasons described above with respect to claim 1. Accordingly, Applicant requests that the rejection of claim 13 under 35 U.S.C. § 102(b) be withdrawn.

Given that claims 14-18 depend from independent claim 13, which is patentable over the cited reference, Applicant respectfully submits that dependent claims 14-18 are also patentable over the cited reference. Accordingly, Applicant requests that the rejection of claims 14-18 under 35 U.S.C. § 102(b) be withdrawn.

CONCLUSION

It is respectfully submitted that in view of the amendments and remarks set forth herein, the rejections and objections have been overcome. If the Examiner believes a telephone interview would expedite the prosecution of this application, the Examiner is invited to contact Michael J. Mallie at (408) 720-8300.

If there are any additional charges, please charge them to Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

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